SS - 65/63
20 March 1963

MEMORANDUM TO: Chief, CIA/PID (NPIC)

THROUGH : Chief, Support Staff

FROM : Chief, Support Section

SUBJECT : Design of a Photo Interpretation Automaton

1. The research being carried on by the [redacted] STAT
STAT [redacted] is very interesting but I see no direct application to our work. Our job does not consist of simple recognition tasks in most instances. Possibly military units would have an interest for tactical interpretation.

2. The problem of pattern segmentation is difficult at times even for the PI. As pointed out in the report, Design of a Photo Interpretation Automaton, the situation appears almost hopeless when one finds patterns of widely varying sizes, etc.

[redacted] STAT

Declass Review by NGA.

14 March 1963

Steve,

My comments on this can best be summarized as follows:

1. I think this is extremely interesting and potentially very significant work that can ultimately have a real effect on the photo-interpretation process. Applications (obviously simpler, since concerned with a one-dimensional continuum rather than two-dimensional) of this approach to processing sonar returns are, I believe, near the point of being operational.

2. It should be noted that this approach is not one that would be operationally implemented on a general purpose digital computer. The computer is used only for simulation.

3. As I have previously remarked, [redacted] has given counter-examples of patterns that are demonstrably indistinguishable by a "Perceptron" - however this does not necessarily rule out practical application of the capabilities inherent in the approach. Rather it demonstrates a theoretical restraint that is significant in theoretical consideration of "artificial intelligence". STAT

[redacted] STAT